


<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2010-0216-E</b></p> <p><b>Date: 21 October 2010</b></p> <p>Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p><b>Type Approval Holder's Name :</b></p> <p>Eurocopter Deutschland GmbH</p>	<p><b>Type/Model designation(s) :</b></p> <p>BO105 helicopters</p>
TCDS Number :	EASA.R.011
Foreign AD :	Not applicable
Supersedure :	None
<b>ATA 62</b>	<b>Main Rotor – Main Rotor Blade Erosion Protective Shell – Inspection / Replacement</b>
Manufacturer(s):	Eurocopter Deutschland GmbH (ECD), Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH
Applicability:	BO105 A, BO105 C, BO105 D, BO105 LS A-1, BO105 LS A-3 and BO105 S helicopters, all variants (except variants CB-5 and DBS-5), all serial numbers.
Reason:	<p>During an inspection on a BO105 helicopter, debonding was found on the erosion protective shell of one of the main rotor blades. Investigation showed that the reason for this debonding was incorrect installation of the erosion protective shell.</p> <p>This condition, if not corrected, could result in loss of the erosion protective shell during flight, leading to unbalance of the main rotor and high vibrations which could cause damage to the helicopter. A detached erosion protective shell could damage the tail boom or tail rotor, possibly resulting in loss of tail rotor control, or fall away from the helicopter, possibly causing serious injuries to the persons on the ground.</p> <p>To address this unsafe condition, ECD has published Alert Service Bulletin (ASB) ASB BO105-10-124 and ASB-BO105LS-10-12 that specify a one-time inspection of the main rotor blades for correct installation of the erosion protective shell.</p> <p>Consequently, EASA Proposed Airworthiness Directive (PAD) 10-095 was published, which proposed to require the accomplishment of the inspection as outlined in the ECD ASB, as applicable to helicopter Model, and corrective action, depending on findings.</p>

	<p>Since the issuance of EASA PAD 10-095, one helicopter has lost its erosion shell during (hover) flight which led to a precautionary landing with no further damage. Prompted by this occurrence, ECD has published Revision 1 to ASB BO105-10-124 and ASB-BO105LS-10-12 to reduce the flight hours for the one-time inspection from 50 to 10.</p> <p>For the reasons described above, this AD requires the accomplishment of the inspection as outlined in the latest revision of the ECD ASB, and corrective actions, depending on findings.</p>
Effective Date:	23 October 2010
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> <li>(1) Within 10 flight hours, or 4 flight cycles, or 4 weeks, whichever occurs first after the effective date of this AD, accomplish the following actions: <ol style="list-style-type: none"> <li>(1.1) Identify the Part Number (P/N) of the main rotor blades and determine whether any blades are installed on which the erosion protective shell has been replaced between September 2006 and March 2010. The affected main rotor blades are identified in ECD ASB BO105-10-124 and ASB-BO105LS-10-12.</li> <li>(1.2) If the installed main rotor blades match the conditions as specified in paragraph (1.1) of this AD, accomplish a one-time inspection for debonding of the erosion protective shell on the affected main rotor blades in accordance with the instructions of ASB BO105-10-124 and ASB-BO105LS-10-12, as applicable to helicopter model.</li> </ol> </li> <li>(2) If, during the inspection as required by paragraph (1.2) of this AD, debonding is detected, replace the erosion protective shell at the time indicated in, and in accordance with the instructions of, Chapter 14-2 of the applicable BO105 Maintenance Manual (MM).</li> <li>(3) Inspections and corrective actions accomplished prior to the effective date of this AD, in accordance with the original issue of ECD ASB BO105-10-124 or ASB-BO105LS-10-12, as applicable to helicopter Model, are acceptable to comply with the requirements of paragraphs (1) and (2) of this AD. After the effective date of this AD, inspections and corrective actions must be accomplished in accordance with ECD ASB BO105-10-124 at R1 or ASB-BO105LS-10-12 at R1, as applicable to helicopter Model.</li> <li>(4) From the effective date of this AD, do not install on any helicopter a main rotor blade on which the erosion protective shell has been replaced between September 2006 and March 2010, identified in ECD ASB BO105-10-124 or ASB-BO105LS-10-12, as applicable to helicopter Model, unless it has been inspected and, depending on findings, corrected in accordance with the requirements of this AD.</li> </ol>
Ref. Publications:	<p>ECD ASB BO105-10-124 Revision 1 dated 18 October 2010.</p> <p>ECD ASB-BO105LS-10-12 Revision 1 dated 20 October 2010.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p> <p>ECD MM BO105, MM BO105 LS A-1 and MM BO105 LS A-3</p>
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was posted on 03 September 2010 as PAD 10-095 for consultation until 01 October 2010. No comments were received during the consultation period.</li> <li>3. Enquiries regarding this AD should be referred to the Airworthiness</li> </ol>

	<p>Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</p> <p>4. For any question concerning the technical content of the requirements in this AD, please contact: Eurocopter Deutschland GmbH Industriestraße 4 D-86607 Donauwörth, Germany Telephone: +49 (0)151-1422 8976, Facsimile: +49 (0)906-71-4111</p>
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